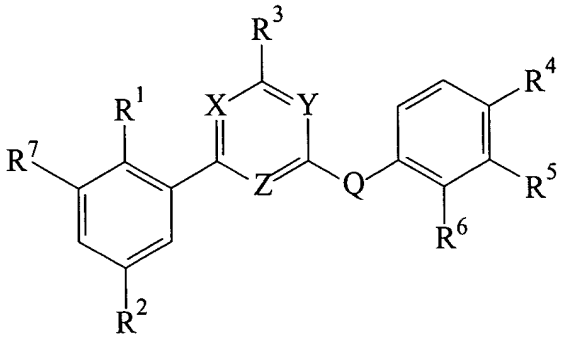
CLAIMS

1. A compound or physiologically acceptable salt thereof, wherein the compound has the formula:



wherein:

X, Y and Z are N, CH or CR where R is alkyl, alkoxy, Cl, Br, NH_2, NHR′ or NR′R′′ where R′ and R′′ independently are alkyl;

Q is NR, RN-$(CH_2)_n$, $(CH_2)_n$-NR, O, O-$(CH_2)_n$, $(CH_2)_n$-O, S, S-$(CH_2)_n$ or $(CH_2)_n$-S, where n is 1-10 and R is H or alkyl;

R^1 is H, OH, alkyl, alkoxy, Cl, F, Br, CR_3 where R_3 is Cl_3, F_3 or Br_3, NH_2, NHR or NRR′ where R and R′ independently are alkyl;

R^2 and R^7 are independently H, OH, alkyl, alkoxy, Cl, F, Br, I or CR_3 where R_3 is Cl_3, F_3 or Br_3;

R^3 is H, alkyl, alkoxy, Cl, CCl_3, NH_2, NHR or NRR′ where R and R′ independently are alkyl or acyl;

R^4, R^5, and R^6 are independently H, OH, alkyl, alkenyl, alkynyl, alkoxy, $(CH_2)_n$-OR where R is H or alkyl and n is 1-10, Cl, F, Br, CR_3 where R_3 is Cl_3, F_3 or Br_3, acyl, heterocycle, $N^+(=O)O^-$, C≡N, N_3, $B(OH)_2$, SH, SR or $S(=O)_2R$ where R is alkyl, NH_2, NHR or NRR′ where R and R′ independently are alkyl, or R^4 and R^5 or R^5 and R^6 are taken together with the benzene ring to form a heterocycle;

and with the proviso that two of X, Y and Z are N.

2. The compound or salt thereof of claim 1 wherein X and Y of the compound or salt thereof are N.

3. The compound or salt thereof of claim 1 wherein Q of the compound or salt thereof is NH.

4. The compound or salt thereof of claim 1 wherein R^4 or R^5 of the compound or salt thereof is acyl.

5. The compound or salt thereof of claim 1 wherein R^1 of the compound or salt thereof is alkyl, alkoxy or Cl.

6. The compound or salt thereof of claim 1 wherein R^2 of the compound or salt thereof is Cl or Br.

7. The compound or salt thereof of claim 1 wherein R^3 of the compound or salt thereof is alkyl or NH_2.

8. The compound or salt thereof of claim 1 wherein R^4 or R^5 of the compound or salt thereof is alkyl, Cl, Br, CF_3, CH_2-OH, $(CH_2)_2$–OH, $N^+(=O)O^-$, C≡N, or C(=O)R wherein R is alkyl or alkoxy, or R^4 and R^5 are taken together with the benzene ring to form indazole.

9. The compound or salt thereof of claim 1 wherein the compound is any one of compounds 1-192 of Table 1, or physiologically acceptable salts thereof.

10. A pharmaceutical composition comprising a compound or salt thereof according to claim 1 in combination with a pharmaceutically acceptable carrier or diluent.

11. The pharmaceutical composition of claim 10 wherein X and Y of the compound or salt thereof are N.

12. The pharmaceutical composition of claim 10 wherein Q of the compound or salt thereof is NH.

13. The pharmaceutical composition of claim 10 wherein R^4 or R^5 of the compound or salt thereof is acyl.

14. The pharmaceutical composition of claim 10 wherein R^1 of the compound or salt thereof is alkyl, alkoxy or Cl.

15. The pharmaceutical composition of claim 10 wherein R^2 of the compound or salt thereof is Cl or Br.

16. The pharmaceutical composition of claim 10 wherein R^3 of the compound or salt thereof is alkyl or NH_2.

17. The pharmaceutical composition of claim 10 wherein R^4 or R^5 of the compound or salt thereof is alkyl, Cl, Br, CF_3, CH_2-OH, $(CH_2)_2$–OH, $N^+(=O)O^-$, C≡N, or C(=O)R wherein R is alkyl or alkoxy, or R^4 and R^5 are taken together with the benzene ring to form indazole.

18. The pharmaceutical composition of claim 10 wherein the compound is any one of compounds 1-192 of Table 1, or physiologically acceptable salts thereof.

19. A method for reducing the activity of lysophosphatidic acid acyltransferase β (LPAAT-β) comprising contacting LPAAT-β with a compound or salt thereof according to claim 1 or a composition according to claim 10 in an amount effective to reduce LPAAT-β activity.

20. The method of claim 19 wherein the LPAAT-β resides in an animal.

21. The method of claim 20 wherein the animal is a mammal.

22. The method of claim 19 wherein X and Y of the compound or salt thereof are N.

23. The method of claim 19 wherein Q of the compound or salt thereof is NH.

24. The method of claim 19 wherein R^4 or R^5 of the compound or salt thereof is acyl.

25. The method of claim 19 wherein R^1 of the compound or salt thereof is alkyl, alkoxy or Cl.

26. The method of claim 19 wherein R^2 of the compound or salt thereof is Cl or Br.

27. The method of claim 19 wherein R^3 of the compound or salt thereof is alkyl or NH_2.

28. The method of claim 19 wherein R^4 or R^5 of the compound or salt thereof is alkyl, Cl, Br, CF_3, CH_2-OH, $(CH_2)_2$–OH, $N^+(=O)O^-$, C≡N, or C(=O)R wherein R is alkyl or alkoxy, or R^4 and R^5 are taken together with the benzene ring to form indazole.

29. The method of claim 19 wherein the compound is any one of compounds 1-192 of Table 1, or physiologically acceptable salts thereof.

30. A method for inhibiting the proliferation of a cell in which the activity of lysophosphatidic acid acyltransferase β (LPAAT-β) is required for the proliferation of the cell comprising contacting the cell with a compound or salt thereof according to claim 1 or a composition according to claim 10 in an amount effective to inhibit the proliferation of the cell.

31. The method of claim 30 wherein the cell resides in an animal.

32. The method of claim 31 wherein the animal is a mammal.

33. The method of claim 30 wherein X and Y of the compound or salt thereof are N.

34. The method of claim 30 wherein Q of the compound or salt thereof is NH.

35. The method of claim 30 wherein R^4 or R^5 of the compound or salt thereof is acyl.

36. The method of claim 30 wherein R^1 of the compound or salt thereof is alkyl, alkoxy or Cl.

37. The method of claim 30 wherein R^2 of the compound or salt thereof is Cl or Br.

38. The method of claim 30 wherein R^3 of the compound or salt thereof is alkyl or NH_2.

39. The method of claim 30 wherein R^4 or R^5 of the compound or salt thereof is alkyl, Cl, Br, CF_3, CH_2-OH, $(CH_2)_2$–OH, $N^+(=O)O^-$, C≡N, or C(=O)R wherein R is alkyl or alkoxy, or R^4 and R^5 are taken together with the benzene ring to form indazole.

40. The method of claim 30 wherein the compound is any one of compounds 1-192 of Table 1, or physiologically acceptable salts thereof.

41. A method for treating a cancer in which lysophosphatidic acid acyltransferase β (LPAAT-β) activity is associated comprising administering to an animal in need, a compound or salt thereof according to claim 1 or a composition according to claim 10 in an amount effective to treat the cancer.

42. The method of claim 41 wherein the animal is a mammal.

43. The method of claim 41 wherein X and Y of the compound or salt thereof are N.

44. The method of claim 41 wherein Q of the compound or salt thereof is NH.

45. The method of claim 41 wherein R^4 or R^5 of the compound or salt thereof is acyl.

46. The method of claim 41 wherein R^1 of the compound or salt thereof is alkyl, alkoxy or Cl.

47. The method of claim 41 wherein R^2 of the compound or salt thereof is Cl or Br.

48. The method of claim 41 wherein R^3 of the compound or salt thereof is alkyl or NH_2.

49. The method of claim 41 wherein R^4 or R^5 of the compound or salt thereof is alkyl, Cl, Br, CF_3, CH_2-OH, $(CH_2)_2$–OH, $N^+(=O)O^-$, C≡N, or C(=O)R wherein R is alkyl or alkoxy, or R^4 and R^5 are taken together with the benzene ring to form indazole.

50. The method of claim 41 wherein the compound is any one of compounds 1-192 of Table 1, or physiologically acceptable salts thereof.

51. A coated medical device for inhibiting the proliferation of a cell in which the activity of lysophosphatidic acid acyltransferase β (LPAAT-β) is required for the proliferation of the cell comprising a medical device coated with a compound or salt thereof according to claim 1 or a composition according to claim 10.

52. The device of claim 51 wherein X and Y of the compound or salt thereof are N.

53. The device of claim 51 wherein Q of the compound or salt thereof is NH.

54. The device of claim 51 wherein R^4 or R^5 of the compound or salt thereof is acyl.

55. The device of claim 51 wherein R^1 of the compound or salt thereof is alkyl, alkoxy or Cl.

56. The device of claim 51 wherein R^2 of the compound or salt thereof is Cl or Br.

57. The device of claim 51 wherein R^3 of the compound or salt thereof is alkyl or NH_2.

58. The device of claim 51 wherein R^4 or R^5 of the compound or salt thereof is alkyl, Cl, Br, CF_3, CH_2-OH, $(CH_2)_2$–OH, $N^+(=O)O^-$, C≡N, or C(=O)R wherein R is alkyl or alkoxy, or R^4 and R^5 are taken together with the benzene ring to form indazole.

59. The device of claim 51 wherein the compound is any one of compounds 1-192 of Table 1, or physiologically acceptable salts thereof.